

- AI
- ☐ X corresponds to the end function of said unit after reaction with an amine or carboxylic acid function;
 - ☐ R^1 , which may be identical or different, represents a linear or branched alkyl radical comprising 2 to 4 carbon atoms;
 - ☐ OA, which may be identical or different, represents an oxyethylenated, oxypropylenated or oxybutylenated radical, or mixtures thereof;
 - ☐ R^2 , R'^2 , R^3 and R^4 , which may be identical or different, represent:
 - a linear or branched alkyl radical comprising 2 to 18 carbon atoms,
 - an aryl radical comprising one or more optionally substituted aromatic nuclei,
 - ☐ m is equal to 0 or 1,
 - ☐ n is an integer between 4 and 800,
 - ☐ r is such that the number of amide bonds is between 1 and 15 per unit (I),
 - ☐ s is such that the number of amide bonds is between 1 and 15 per unit (I),
 - ☐ the molar ratio of the number of units (III) to the number of units (I) is between 0.5/1 and 1.4/1;
 - ☐ the various units are linked together at least by means of amide bonds; and
 - ☐ the number-average molar mass of the copolymer is less than 100 000 g/mol.

2. (Amended) The gelling agent as claimed in claim 1, wherein the units (I) of the copolymer comprise a sequence of oxyethylenated, oxypropylenated or oxyethylenated/oxypropylenated radicals, the sum of the units being equal to n.

3. (Amended) The gelling agent as claimed in claim 1, wherein the radicals R^2 , R'^2 , R^3 and R^4 , which may be identical or different, represent linear or branched radicals comprising 2 to 12 carbon atoms.

AI
4. (Amended) The gelling agent as claimed in claim 1, wherein the radicals R^2 , R'^2 , R^3 and R^4 , which may be identical or different, are selected from the group consisting of:

☐ ethyl, 1-methylethyl, propyl, 1-methylpropyl, butyl, hexyl, heptyl, octyl, decyl, undecyl and lauryl radicals.

5. (Amended) The gelling agent as claimed in claim 1, wherein the radicals R^2 , R'^2 , R^3 and R^4 , which may be identical or different, represent aryl radicals comprising one or more optionally substituted aromatic nuclei.

6. (Amended) The gelling agent as claimed in claim 1, wherein the radicals R^2 , R'^2 , R^3 and R^4 , which may be identical or different, comprise:

★ an aromatic nucleus, the reactive functions (amines or carboxylic acids) being in an ortho, meta or para position,

★ two aromatic nuclei, linked via inert groups, or peri-fused, the reactive functions (amines or carboxylic acids) being on the carbon atoms 1 and 2, 1 and 4, 1 and 5, 1 and 6, 1 and 7 or 2 and 7.

7. (Amended) The gelling agent as claimed in claim 1, wherein the units (IIa) or (IIb) are selected from the group consisting of polyamide 6, polyamide 10, polyamide 11, polyamide 12, polyamide 6, 6 or a random copolymer of at least two such polyamides, in all proportions.

AI 8. (Amended) The gelling agent as claimed in claim 1, wherein r and s, which may be identical or different, are such that the number of amide bonds is between 5 and 10 per unit (I).

9. (Amended) The gelling agent as claimed in claim 1, wherein the number-average molecular mass of the copolymer is between 10 000 and 50 000 g/mol.

10. (Amended) The gelling agent as claimed in claim 1, wherein the relatively nonpolar compound is in the Hansen solubility space, and has the following parameters:

- δP of Keesom interactions of less than or equal to $16.5 \text{ (J/cm}^3\text{)}^{1/2}$
- δH of hydrogen bonds of less than or equal to $10.5 \text{ (J/cm}^3\text{)}^{1/2}$
- δD of London interactions of greater than or equal to $15 \text{ (J/cm}^3\text{)}^{1/2}$.

11. The gelling agent as claimed in claim 1, wherein the nonionic surfactant is selected from the group consisting of:

- polyoxyalkylenated (polyethoxyethylenated, polyoxypropylenated or polyoxybutylenated) alkylphenols in which the alkyl substituent is C₆-C₁₂ and containing from 5 to 25 oxyalkylene units;
- polyoxyalkylenated C₈-C₂₂ aliphatic alcohols containing from 1 to 25 oxyalkylene (oxyethylene or oxypropylene) units;
- products resulting from the condensation of ethylene oxide and/or propylene oxide with propylene glycol or ethylene glycol;
- ethoxylated and/or propoxylated C₈-C₁₈ fatty acids containing from 5 to 25 ethoxylated and/or propoxylated units;
- alkoxyated amido amines containing from 1 to 50 oxyalkylenated units;
- alkoxyated terpenic hydrocarbons, containing from 1 to 30 oxyethylene and/or oxypropylene units;
- alkylpolyglycosides which may be obtained by condensation of glucose with primary fatty alcohols containing a C₄-C₂₀ alkyl group and also an average number of glucose units of about from 0.5 to 3 per mole of alkylpolyglycoside.

12. (Amended) The gelling agent as claimed in claim 1, wherein the amount of copolymer relative to the relatively nonpolar compound or the nonionic surfactant is between 0.1% and 15% by weight.

13. (Amended) A method for gelation of a relatively nonpolar compound, comprising using the gelling agent as claimed in claim 1, wherein the copolymer is combined with a nonionic or anionic surfactant.

A2 14. (Amended) The method as claimed in claim 13, wherein the amount of nonionic or anionic surfactant relative to the relatively nonpolar compound is between 5% and 20% by weight.

15. (Amended) The gelling agent as claimed in claim 1, wherein the copolymer is combined with a filler of lamellar structure.

16. (Amended) The gelling agent as claimed in claim 15, wherein the amount of filler represents up to 20% by weight of the copolymer.

17. (Amended) The gelling agent as claimed in claim 15, wherein the filler is introduced during the preparation of the copolymer and/or during the use of said copolymer.

18. (Amended) A composition of formulations intended for cleaning metals comprising an effective amount of the gelling agent according to claim 1.

19. (Amended) A detergent formulation used in the industrial field comprising an effective amount of the gelling agent according to claim 1.

A2 20. (Amended) A formulation intended for stripping paints and varnishes comprising an effective amount of the gelling agent according to claim 1.

21. (Amended) A method intended for cleaning or stripping vertical surfaces comprising using the gelling agent according to claim 15.

22. (Amended) A method for treating plants comprising using an effective amount of the gelling agent according to claim 1.

23. (Amended) A composition for ink printing comprising an effective amount of the gelling agent according to claim 1.